

REMARKS

Reconsideration of this application, as presently amended, is respectfully requested.

Claims 1-13 are pending in this application. Claims 1-13 stand rejected.

Claim Objections

Claims 1 and 8 were objected to for various informalities. Applicants appreciate the Examiner's careful consideration of the claims.

With respect to claim 1, the Office Action asserts that the language "the elements *is*" in claim 1, lines 14-15, should be changed to --the elements *are*--. It is respectfully submitted that the current claim language is grammatically correct. Specifically, the verb "is" refers to "light-emitting" and not the phrase "of the elements." In other words "whether light-emitting ... *is* executed" is correct, while "whether light-emitting ... *are* executed" is incorrect.

Claim 8, has been amended to obviate the objection in accordance with the Examiner's recommendations. In particular, the phrases "a light-emitting threshold voltage" and "a reverse-bias voltage" in claim 8 have antecedent basis in claim 7 and claim 1, respectively. Therefore, claim 8 has been amended, as suggested by the Examiner.

Further, claim 1 has been amended to improve form in accordance with preferred U.S. practice. For example, the transitional phrase "comprising" has been added to claim 1.

In view of the above-noted amendments, withdrawal of the objections to the claims is respectfully requested.

Claim Rejections- 35 U.S.C. §112, second paragraph

Claims 1-9 were rejected under 35 U.S.C. §112, second paragraph, for indefiniteness. Specifically, the Examiner points out that the term “a reverse bias voltage” in line 6 of claim 1 appears to be the same as the “reverse direction voltage” recited in line 12 of claim 1. The Examiner refers to page 8, line 18 of the specification.

It is respectfully submitted that the “reverse bias voltage” and the “reverse direction voltage” are different voltages in terms of purposes. The specification refers to both a “reverse bias voltage” (+VM, see present application, e.g., page 13, line 15) and a “reverse direction voltage” (-V, see present application, e.g., page 13, line 4). Consistent with the specification, for example in claim 1, the “reverse bias voltage” may correspond to +VM and the “reverse direction voltage” may correspond to -V.

By “reverse bias voltage” is meant a voltage for preventing a crosstalk phenomenon (crosstalk light emitting) where an EL element connected to a cathode line which is not selected for scanning emits light. The voltage is preferably one that is opposite in polarity to the forward voltage V_f applied to an EL element to be emitted. For example, $V_f = +12\text{ V}$, and the reverse bias voltage = -11 to -13 V.

By “forward voltage” is meant a voltage for extending a light emitting life of an EL element. There are no restrictions on the voltage except that it is opposite the polarity to V_f . Even -1 V or -20 V may achieve the purpose of extending the life. Therefore, the reverse bias voltage may be used for a reverse direction voltage, which is used for the purpose of extending the life.

Accordingly, claim 1 has not been amended as suggested by the Examiner to change “reverse direction voltage” to --reverse bias voltage-- because these voltages can be different voltages.

Reconsideration and withdrawal of the §112, second paragraph, rejection are respectfully requested.

Claim Rejection - 35 U.S.C. §102

Claims 1 -13 were rejected under 35 U.S.C. §102(b) as being unpatentable over **Yoshida et al.** (USP 6,351,076). For the reasons set forth in detail below, this rejection, to the extent that it is considered to apply to the amended claims, is respectfully traversed.

The Office Action considers the voltage V_L applied to the EL elements in **Yoshida** to correspond to the claimed *forward voltage applied to all the light-emitting elements at least one time in a predetermined period* and considers the voltage V_{CC} to correspond to the claimed *reverse direction voltage applied to all the light-emitting elements at least one time in the predetermined period*. See Office Action, page 3, last two lines and page 4, lines 1-4.

It appears that the Examiner considers the voltages applied to the EL elements through the current sources 17_2 and 17_3 in Fig. 13 of **Yoshida et al.** to correspond to forward voltages in a manner similar to that described in the present specification on page 14, lines 11-14, and the Examiner apparently considers the voltages V_L , which are described as forward voltages (see **Yoshida et al.**, col. 16, lines 28-33), to be similar to the forward voltage +V1 described on page 14, lines 14-15 of the present application.

Further, the Examiner is apparently giving a broad interpretation to the language “reverse direction voltage is applied to all light-emitting elements at least one time in the predetermined period.” More specifically, first, the Examiner appears to consider the claim language broad enough to read on the voltage V_{CC} applied to the cathode lines because claim 1 recites that the reverse direction voltage is applied to all *light-emitting elements* (whether applied to the anode line or cathode line doesn’t matter). Second, because claim 1 does not specify the length of the predetermined period, the Examiner may be reading the predetermined period to be any length of time. For example, the Examiner may be reading the predetermined period to extend the length of both the scanning period and a reset period.

In view of the above, claim 1 has been amended to clarify that the forward voltage and the reverse direction voltage are applied to the all the data lines and the predetermined period is a scanning period.

Yoshida et al. do not disclose that the forward voltage and reverse direction voltage are applied to all the data lines during a scanning period. In particular, **Yoshida et al.** does not teach that the reverse bias voltage V_{CC} is applied to all the data lines during a scanning period.

In view of the above amendments and remarks, it is respectfully submitted that independent claim 1, and claims 2-13 which depend therefrom, patentably distinguish over the cited prior art and define allowable subject matter. Reconsideration and withdrawal of the rejection under §102 are respectfully requested.

Application No. 10/799,694
Group Art Unit: 2821

Amendment under 37 C.F.R. §1.111
Attorney Docket No.: 042163

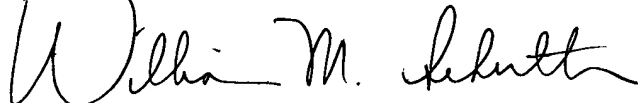
CONCLUSION

In view of the foregoing amendments and accompanying remarks, it is submitted that all pending claims are in condition for allowance. A prompt and favorable reconsideration of the rejection and an indication of allowability of all pending claims are earnestly solicited.

If the Examiner believes that there are issues remaining to be resolved in this application, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite and complete prosecution of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



William M. Schertler
Attorney for Applicants
Registration No. 35,348
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

WMS/dlt